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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,480	10/20/2003	Muniswamappa Anjanappa		7902
	7590	12/02/2005	EXAMINER NGUYEN, DINH Q	
Clifford Kraft 320 Robin Hill Dr. Naperville, IL 60540			ART UNIT 3752	PAPER NUMBER
DATE MAILED: 12/02/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

E

Office Action Summary	Application No.	Applicant(s)	
	10/689,480	ANJANAPPA ET AL.	
	Examiner	Art Unit	
	Dinh Q. Nguyen	3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/17/04 & 7/02/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The claim portion of the Response to Election and Restriction filed on 10/24/05 is not in compliance with the Revised Amendment Practice 37 CFR 1.121 effective dated 7/30/03.

2. Claims 6, and 7 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 10/24/05.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 9, 10, 13, 15-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilmers.

Wilmers discloses micro-dispensing nozzle or injector valve having a housing 1, at least one exit orifice 22, a magnetostrictive valve with a magnetostrictive rod 7(see figure 1).

With respect to claim 15-18, the apparatus shown by Wilmers is capable of performing the method or steps recited in the claims.

5. Claims 1-5, 9, 10, 13, 15-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Focke et al.

Focke et al discloses micro-dispensing nozzle or injector valve having a housing 10, at least one exit orifice 22, a magnetostrictive valve 11 with a magnetostrictive rod 14(see figure 1).

With respect to claim 15-18, the apparatus shown by Focke et al is capable of performing the method or steps recited in the claims.

6. Claims 10, 13, 15-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Reinicke et al.

Reinicke et al discloses a magnetostrictive valve 10 with a magnetostrictive rod 35, an exit orifice 15 (see figure 1).

With respect to claim 15-18, the apparatus shown by Reinicke et al is capable of performing the method or steps recited in the claims.

7. Claims 1-5, 8-10, 13, 15-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Gipson et al.

Gipson et al discloses micro-dispensing nozzle or injector valve having a housing 402, at least one exit orifice 406, a magnetostrictive valve with a magnetostrictive rod 414(see figure 4), a pump 104 connected to the micro-dispensing nozzle or the injector valve, and a controller 108 (see figure 1).

With respect to claim 15-18, the apparatus shown by Gipson et al is capable of performing the method or steps recited in the claims.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 11, 12, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilmers or Focke et al or Reinicke et al or Gipson et al.

Wilmers or Focke et al or Reinicke et al or Gipson et al teaches all the limitations of the claims except for the rod magnetostrictive length of 2 mm or 30mm, an operating frequency of faster than 1kHz. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide the device of Wilmers or Focke et al or Reinicke et al or Gipson et al with the rod magnetostrictive length of 2 mm or 30mm, or an operating frequency of faster than 1kHz, because Application has not disclosed that the rod magnetostrictive length of 2 mm or 30mm, or an operating frequency of faster than 1kHz provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either claimed dimensions or the Wilmers, Focke et al, Reinicke et al, Gipson et al dimensions. Therefore, it would have been an obvious matter of design choice to modify the device of Wilmers or Focke et al or Reinicke et al or Gipson et al to obtain the invention as specified in claims 11, 12, 14.

Conclusion

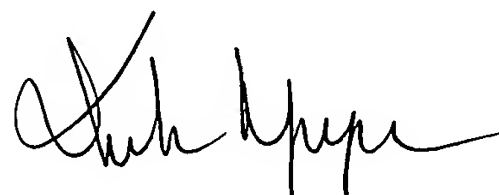
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to show the art with respect to a magnetostrictive valve: Henkel, Spain, and Maruyama et al.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dinh Q. Nguyen whose telephone number is 571-272-4907. The examiner can normally be reached on Monday-Thursday 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Scherbel can be reached on 571-272-4919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dinh Q Nguyen
Primary Examiner
Art Unit 3752

dqn